

1 **ABSTRACT**

2 Systems and methods for midstream determination of varying available
3 bandwidth for streaming content between two network entities are described.
4 During content streaming, a client requests a server to surge the content
5 transmission rate. One or more bandwidth measurements are taken during the
6 surge to determine if the increased transmission rate can be adequately managed.
7 If the increased transmission rate can be adequately managed, the client may
8 request the server to transmit remaining content at a transmission rate that is not
9 greater than the increased, or surged, transmission rate. In a multi-bitrate file
10 scenario, the surge rate may be higher than the rate of the fastest useable stream.
11 In such a case, the fastest useable stream is selected. If the increased transmission
12 rate is not suitable for future transmission, then the rate may remain at the original
13 transmission rate.